STAIRVILLE

Stage TRI LED Bundle Complete

LED lighting set

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1 General notes

This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to other users, be sure that they also receive this manual.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.

Warning signs	Type of danger
	Warning – hot surface.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used as an electronic illumination effect using LED technics. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

DANGER!

Electric shock caused by short-circuit

Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

WARNING!

Eye damage caused by high light intensity

Never look directly into the light source.

WARNING!

Risk of epileptic shock

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.

WARNING!

Risk of burns

The surface of the device can become very hot during operation.

Do not touch the device with bare hands during operation, and after switching off wait for at least 15 minutes.

NOTICE!

Risk of fire

Do not cover the device nor any ventilation slots. Do not place the device near any direct heat source. Keep the device away from naked flames.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

3 Features

The LED lighting set is specially suited for professional lighting tasks, e.g. at events, on rock stages, in theatres and musicals. It is characterized by low power consumption and long life span.

Special features of this device:

- 4 LED spots with each 7 tri-colour LEDs
- Control via DMX (7 different modes), via buttons and display on the unit and via foot switch
- 14 preprogrammed automatic shows
- Sound control
- Master / slave mode
- Additionally, a T-bar, a foot switching unit and a transportation bag is included in the scope of delivery

4 Installation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

NOTICE!

Risk of overheating

Always ensure sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).

NOTICE!

Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

NOTICE!

Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX output to audio devices such as mixers or amplifiers.

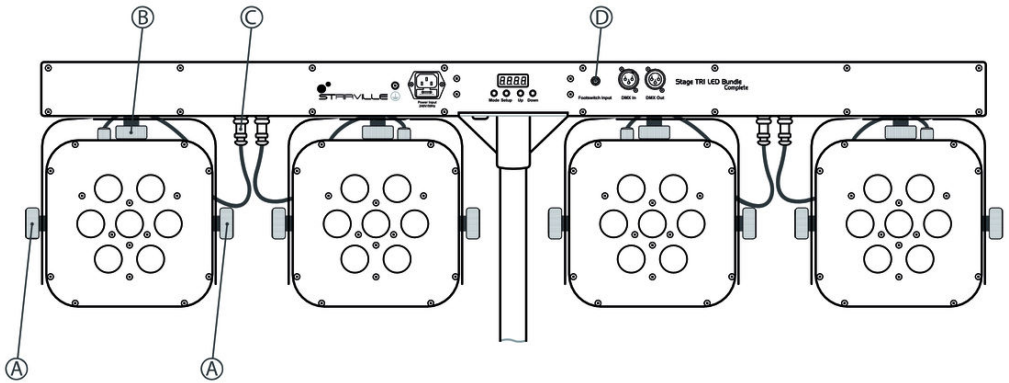
DMX connections

The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for pin assignment.

1	Ground, shielding
2	DMX data (–)
3	DMX data (+)

Pre-installed spots

The four spots (1 … 4, from left to right) are pre-installed on the T-bar. You just have to assemble the tripod and connect the foot switching unit.



A	Locking screws for fixing the height and angle of inclination.
B	Locking screw for fixing the spots on the T-bar and the horizontal alignment (beam direction).

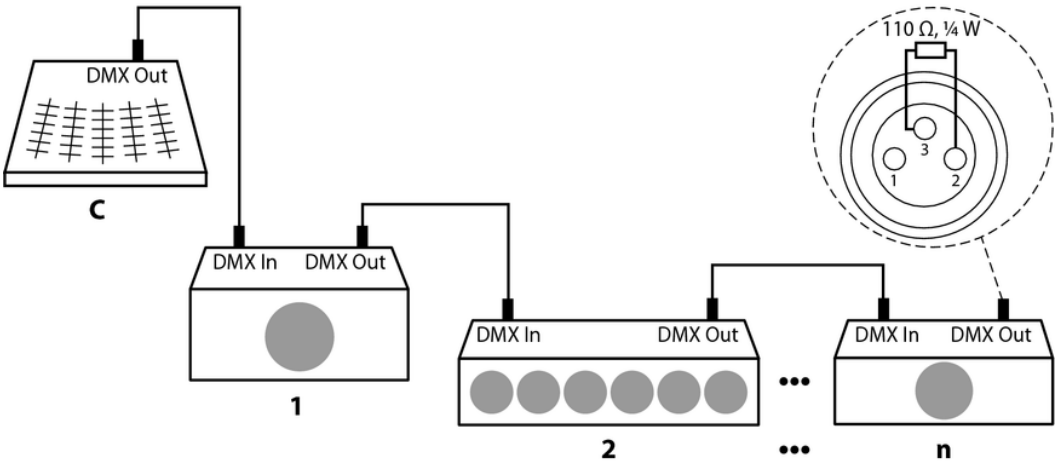
C	Electrical connection of the spots on the T-bar (pre-installed).
D	1/4" phone socket for connecting the foot switching unit. The cable with the phone socket is pre-assembled to the foot switching unit.

5 Starting up

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

Connections in DMX mode

Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor (110 Ω, ¼ W).

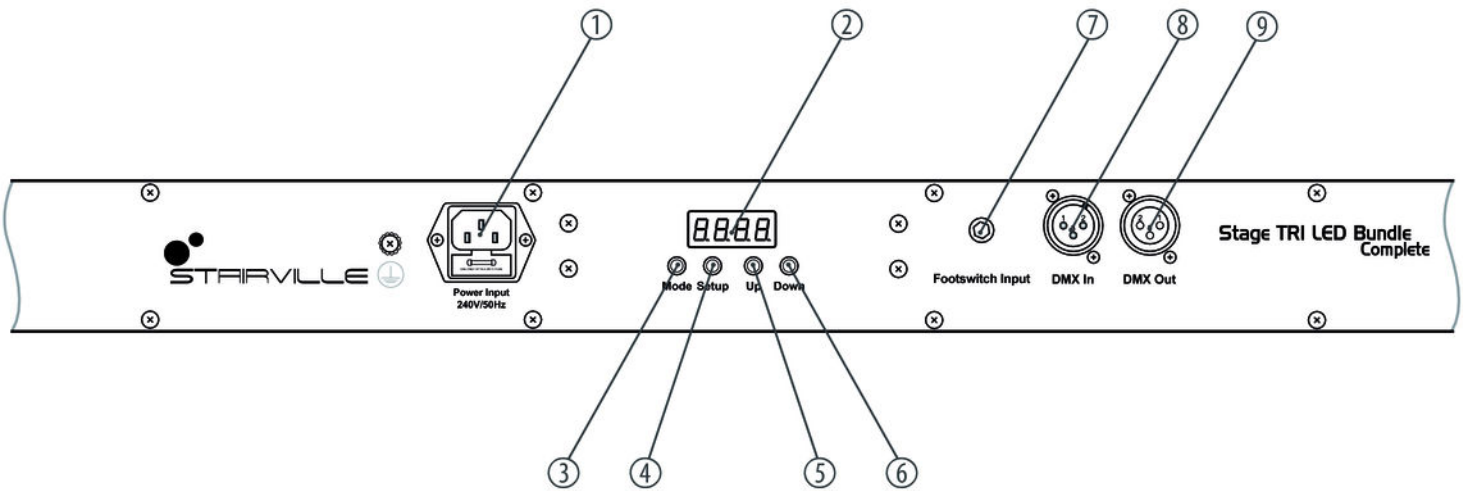


Connections in master/slave mode

When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.

6 Connections and operating elements

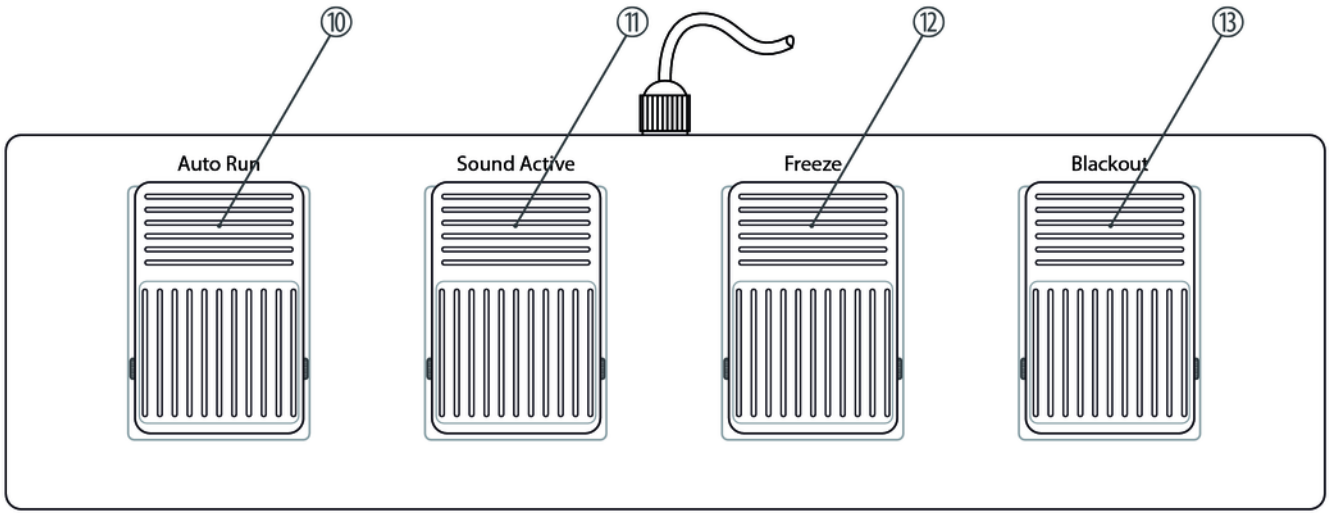
Front panel



1	IEC chassis connector for the mains cable, with fuse holder underneath.
2	Display.
3	*[Mode]* button Activates the main menu and changes between menu items, closes an opened submenu.
4	*[Setup]* button Selects an option of the respective operating mode, confirms the set value.
5	*[Up]* button To increase the displayed value by one.
6	*[Down]* button To decrease the displayed value by one.
7	**Footswitch Input** 1/4" phone socket to connect the foot switching unit.

8	**DMX In** DMX input.
9	**DMX Out** DMX output.

Foot switching unit



10	Foot switch **Auto run** Activates the operating mode ‘Automatic’.
11	Foot switch **Sound active** Activates the operating mode ‘Sound control’.
12	Foot switch **Freeze** Activates the operating mode ‘Freeze’.
13	Foot switch **Blackout** Activates the operating mode ‘Blackout’.

7 Operation

7.1 Starting up the device

Connect the unit to the power grid to start the operation. After a few seconds the display shows a running reset. Then the unit is ready for use.

7.2 Main menu

Press *[Mode]* to activate the main menu and select an operating mode. Use *[Setup]* to select further options. Use *[Up]* and *[Down]* to change the respectively shown value. When the display shows the desired value, press *[Mode]*.

If you don't press any button for about 30 seconds, the display turns off. Press any key to reactivate the display showing the last menu.

The set values are retained even if you disconnect the device from the mains.

Operating mode 'Built-in automatic show'

A built-in automatic show can only be activated if the unit is working in stand-alone mode or as master device in a master / slave combination. This setting is only relevant if the unit is not controlled via DMX.

Press *[Mode]* repeatedly until the display shows *'Pr.xx'*. Now you can select one of the preprogrammed automatic shows. Use *[Up]* and *[Down]* to select a value between *'Pr.01'* and *'Pr.14'*.

Settings for programme 01:

For *'Pr.01'*, you can choose from 7 colours or blackout. Press *[Setup]*. Now use *[Up]* and *[Down]* to select one of the colours.

Press *[Setup]* to set the strobe frequency. Now use *[Up]* and *[Down]* to select a value between *'FS00'* (slow) and *'FS99'* (fast).

Settings for programmes 02 to 12:

To set the speed of the selected automatic show, repeatedly press *[Setup]* until the display shows *'SPxx'*. Now use *[Up]* and *[Down]* to select a value between *'SP01'* (slow) and *'SP99'* (fast) or *'SPFL'* (Flash effect).

To set the fade speed of the selected automatic show, repeatedly press *[Setup]* until the display shows *'Fdxx'*. Now use *[Up]* and *[Down]* to select a value between *'Fd00'* and *'Fd99'*.

To set the strobe frequency, repeatedly press *[Setup]* until the display shows *'FSxx'*. Now use *[Up]* and *[Down]* to select a value between *'FS00'* (slow) and *'FS99'* (fast).

Settings for programmes 13 and 14:

In addition to the adjustment options for programmes 02 to 12 you can set the running colour and the background colour here.

To set the background colour, repeatedly press *[Setup]* until the display shows *'1.xxx'*. Now use *[Up]* and *[Down]* to select a background colour.

To set the running colour, repeatedly press *[Setup]* until the display shows *'2.xxx'*. Now use *[Up]* and *[Down]* to select a running colour.

Operating mode 'Automatic'

Automatic operation can only be activated if the unit is working in stand-alone mode or as master device in a master / slave combination. This setting is only relevant if the unit is not controlled via DMX.

Press *[Mode]* repeatedly until the display shows *'AUTO'*. Press *[Setup]*. Now you can select the number of loops for the programmes to run. Use *[UP]* and *[Down]* to select a value between *'n. 001'* and *'n.100'*.

Press *[Setup]* to adjust the speed. Use *[Up]* and *[Down]* to select a value between *'SP01'* (slow) and *'SP99'* (fast) or *'SPFL'* (flash effect).

To adjust the fade speed, repeatedly press *[Setup]* until the display shows *'Fdxx'*. Now use *[Up]* and *[Down]* to select a value between *'Fd00'* and *'Fd99'*.

To set the strobe frequency, repeatedly press *[Setup]*. Now use *[Up]* and *[Down]* to select a value between *'FS00'* (slow) and *'FS99'* (fast).

DMX mode

This setting is only relevant if the unit is controlled via DMX.

Press *[Mode]* repeatedly until the display shows *'d.xxx'*.

Now you can set the number of the first DMX channel to be used by the device (DMX address). Use *[Up]* and *[Down]* to select a value between 1 and 512 (the display shows *'d.001'* … *'d.512'*).

Make sure that this number matches the configuration of your DMX controller. The following table shows the highest possible DMX address for the different DMX modes.

Mode	Highest possible DMX address
2-channel	511
3-channel	510
4-channel	509
7-channel	506
8-channel	505
14-channel	499
15-channel	498

Press *[Setup]*. Use *[Up]* and *[Down]* to select one of the following DMX operating modes:

- *'d.-P1'* (3 channels)
- *'d.-P2'* (4 channels)
- *'d.-P3'* (8 channels)
- *'d.-P4'* (14 channels)
- *'d.-P5'* (2 channels)
- *'d.-P6'* (15 channels)
- *'d.-P7'* (7 channels)

Operating mode 'Slave'

This setting is only relevant if the unit is operated as slave device in a master / slave configuration and is not controlled via DMX.

Press *[Mode]* repeatedly until the display shows *'SLAv'*.

Sound-control

A sound-controlled automatic show can only be activated if the unit is working in stand-alone mode or as master device in a master / slave combination. This setting is only relevant if the unit is not controlled via DMX.

Press *[Mode]* repeatedly until the display shows *'SU.xx'*. This will activate a sound-controlled automatic show.

Press *[Setup]*. Now you can adjust the sound-control sensitivity. Use *[Up]* and *[Down]* to select a value between 0 (low sensitivity) and 31 (high sensitivity), the display shows *'SU.00'* … *'SU.31'*.

Constant unicoloured pattern

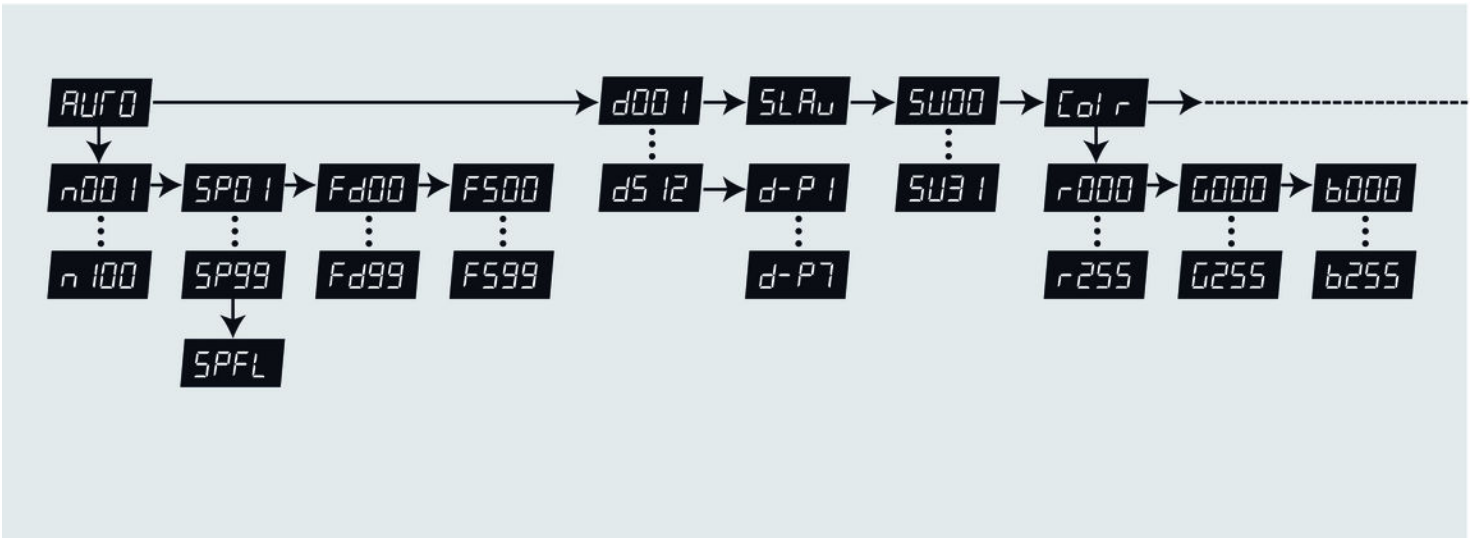
A constant unicoloured pattern can only be activated if the unit is working in stand-alone mode or as master device in a master / slave combination. This setting is only relevant if the unit is not controlled via DMX.

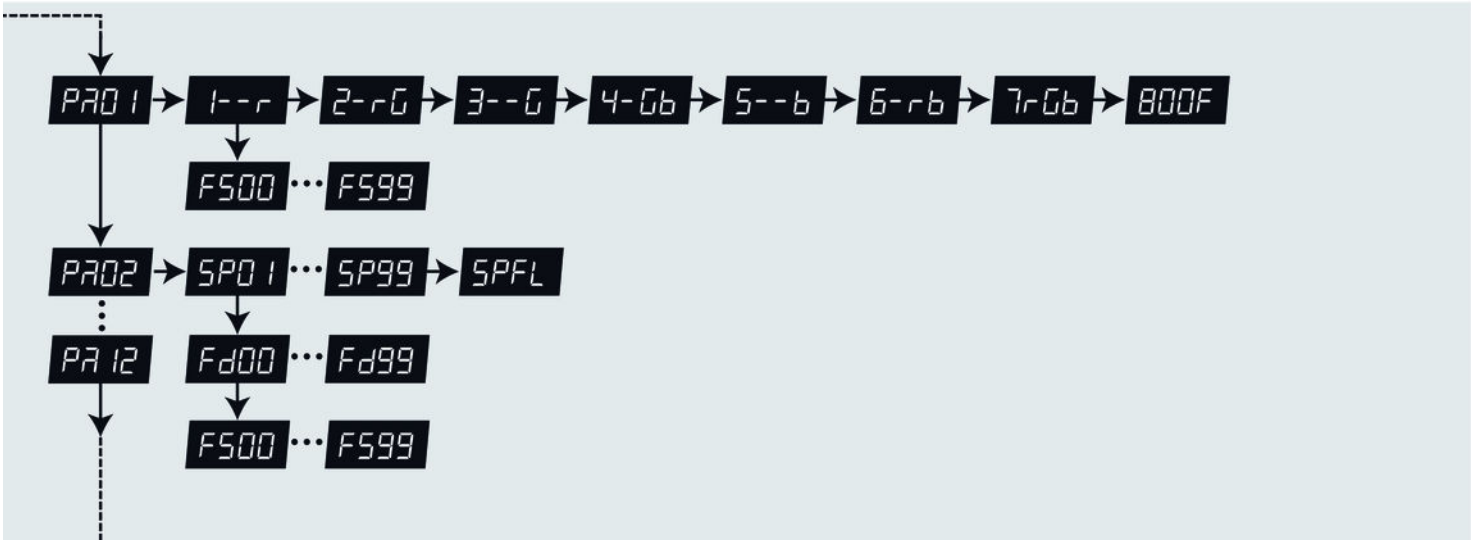
Press *[Mode]* repeatedly until the display shows *'Colr'*. Press *[Setup]*.

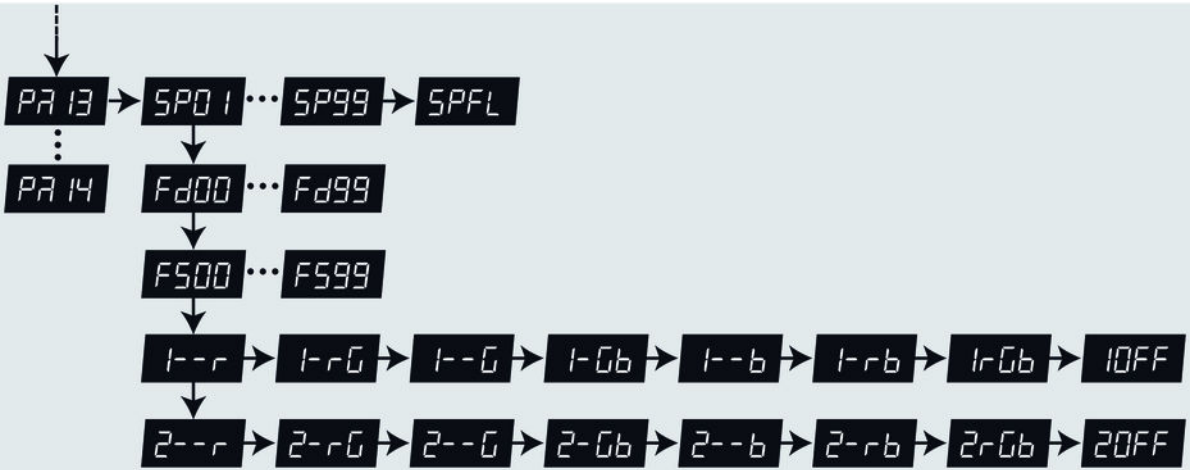
Use *[Up]* and *[Down]* to choose from the following options:

Display	Description
'r.000' … *'r.255'*	Red
'G.000' … *'G.255'*	Green
'b.000' … *'b.255'*	Blue

7.3 Menu overview




PA01
1--r
2-rG
3--G
4-Gb
5--b
6-rb
7rGb
800F
F500
F599
PA02
SP01
SP99
SPFL
PA12
Fd00
Fd99
F500
F599


PA 13
PA 14
SP01
SP99
SPFL
Fd00
Fd99
FS00
FS99
1--r
1-rG
1--G
1-Gb
1--b
1-rb
1rGb
1OFF
2--r
2-rG
2--G
2-Gb
2--b
2-rb
2rGb
2OFF

7.4 Functions in 2-channel DMX mode (d.-P5)

Channel	Value	Function
1	0…9	LEDs off
	10…19	Constant unicoloured pattern in red for all LEDs
	20…29	Constant unicoloured pattern in yellow for all LEDs
	30…39	Constant unicoloured pattern in green for all LEDs
	40…49	Constant unicoloured pattern in cyan for all LEDs
	50…59	Constant unicoloured pattern in blue for all LEDs
	60…69	Constant unicoloured pattern in purple for all LEDs
	70…79	Constant unicoloured pattern in white for all LEDs
	80…89	Preprogrammed automatic show no. 1
	90…99	Preprogrammed automatic show no. 2
		⋮

Channel	Value	Function
	180…189	Preprogrammed automatic show no. 11
	190…199	LEDs off
	200…209	Constant unicoloured pattern in red for all LEDs
	210…219	Preprogrammed automatic show no. 12
	220…229	Preprogrammed automatic show no. 13
	230…239	Preprogrammed automatic show no. 14
	240…255	Sound-controlled show
2	Function depends on channel 1 setting	
	Channel 1 = 0…79	
	No function	
	Channel 1 = 80…239	
	0…255	Increasing speed

Channel	Value	Function
	Channel 1 = 240…225	
	0…255	Increasing sensitivity

7.5 Functions in 3-channel DMX mode (d.-P1)

Channel	Value	Function
1	0…255	Intensity red (0 % to 100 %) for all LEDs
2	0…255	Intensity green (0 % to 100 %) for all LEDs
3	0…255	Intensity blue (0 % to 100 %) for all LEDs

7.6 Functions in 4-channel DMX mode (d.-P2)

Channel	Value	Function
1	0…255	Intensity red (0 % to 100 %) for all LEDs
2	0…255	Intensity green (0 % to 100 %) for all LEDs
3	0…255	Intensity blue (0 % to 100 %) for all LEDs
4	0…255	Dimmer (0 % to 100 %)

7.7 Functions in 7-channel DMX mode (d.-P7)

Channel	Value	Function
1	0…255	Intensity red (0 % to 100 %) for all LEDs
2	0…255	Intensity green (0 % to 100 %) for all LEDs

Channel	Value	Function
3	0…255	Intensity blue (0 % to 100 %) for all LEDs
4	0…9	LEDs off
	10…19	Constant unicoloured pattern in red for all LEDs
	20…29	Constant unicoloured pattern in yellow for all LEDs
	30…39	Constant unicoloured pattern in green for all LEDs
	40…49	Constant unicoloured pattern in cyan for all LEDs
	50…59	Constant unicoloured pattern in blue for all LEDs
	60…69	Constant unicoloured pattern in purple for all LEDs
	70…79	Constant unicoloured pattern in white for all LEDs
	80…89	Preprogrammed automatic show no. 1
	90…99	Preprogrammed automatic show no. 2
		⋮
	180…189	Preprogrammed automatic show no. 11

Channel	Value	Function
	190…199	LEDs off
	200…209	Constant unicoloured pattern in red for all LEDs
	210…219	Preprogrammed automatic show no. 12
	220…229	Preprogrammed automatic show no. 13
	230…239	Preprogrammed automatic show no. 14
	240…255	Sound-controlled show
5	Function depends on channel 4 setting	
	Channel 4 = 0…79	
	No function	
	Channel 4 = 80…239	
	0…255	Increasing speed
	Channel 4 = 240…255	
	0…255	Increasing sensitivity

Channel	Value	Function
6	Function depends on channel 4 setting	
	Channel 4 = 0…9	
	No function	
	Channel 4 = 10…255	
	0…255	Strobe effect, increasing speed
7	0…255	Dimmer (0 % to 100 %)

7.8 Functions in 8-channel DMX mode (d.-P3)

Channel	Value	Function
1	0…255	Intensity red (0 % to 100 %) for all LEDs of spots 1 and 2
2	0…255	Intensity green (0 % to 100 %) for all LEDs of spots 1 and 2

Channel	Value	Function
3	0…255	Intensity blue (0 % to 100 %) for all LEDs of spots 1 and 2
4	0…255	Intensity red (0 % to 100 %) for all LEDs of spots 3 and 4
5	0…255	Intensity green (0 % to 100 %) for all LEDs of spots 3 and 4
6	0…255	Intensity blue (0 % to 100 %) for all LEDs of spots 3 and 4
7	0…255	Strobe effect, increasing speed
8	0…255	Dimmer (0 % to 100 %)

7.9 Functions in 14-channel DMX mode (d.-P4)

Channel	Value	Function
1	0…255	Intensity red (0 % to 100 %) for all LEDs of spot 1
2	0…255	Intensity green (0 % to 100 %) for all LEDs of spot 1

Channel	Value	Function
3	0…255	Intensity blue (0 % to 100 %) for all LEDs of spot 1
4	0…255	Intensity red (0 % to 100 %) for all LEDs of spot 2
5	0…255	Intensity green (0 % to 100 %) for all LEDs of spot 2
6	0…255	Intensity blue (0 % to 100 %) for all LEDs of spot 2
7	0…255	Intensity red (0 % to 100 %) for all LEDs of spot 3
8	0…255	Intensity green (0 % to 100 %) for all LEDs of spot 3
9	0…255	Intensity blue (0 % to 100 %) for all LEDs of spot 3
10	0…255	Intensity red (0 % to 100 %) for all LEDs of spot 4
11	0…255	Intensity green (0 % to 100 %) for all LEDs of spot 4
12	0…255	Intensity blue (0 % to 100 %) for all LEDs of spot 4
13	0…255	Strobe effect, increasing speed
14	0…255	Dimmer (0 % to 100 %)

7.10 Functions in 15-channel DMX mode (d.-P6)

Channel	Value	Function
1	0…9	RGB mode for channels 2 to 15
	10…249	Preprogrammed automatic shows
	250…255	Sound-controlled show
Functions of channels 2 to 15 depend on the setting of channel 1, 0…9		
2	0…255	Dimmer (0 % to 100 %)
3	0…9	No function
	10…255	Strobe effect, increasing speed
4	0…255	Intensity red (0 % to 100 %) for all LEDs of spot 1
5	0…255	Intensity green (0 % to 100 %) for all LEDs of spot 1
6	0…255	Intensity blue (0 % to 100 %) for all LEDs of spot 1
7	0…255	Intensity red (0 % to 100 %) for all LEDs of spot 2

Channel	Value	Function
8	0…255	Intensity green (0 % to 100 %) for all LEDs of spot 2
9	0…255	Intensity blue (0 % to 100 %) for all LEDs of spot 2
10	0…255	Intensity red (0 % to 100 %) for all LEDs of spot 3
11	0…255	Intensity green (0 % to 100 %) for all LEDs of spot 3
12	0…255	Intensity blue (0 % to 100 %) for all LEDs of spot 3
13	0…255	Intensity red (0 % to 100 %) for all LEDs of spot 4
14	0…255	Intensity green (0 % to 100 %) for all LEDs of spot 4
15	0…255	Intensity blue (0 % to 100 %) for all LEDs of spot 4

7.11 Functions of foot switch

Operating mode 'Automatic' Press the foot switch **Auto Run** to start loop playback of the preset programmes.

Operating mode 'Sound-control'	Press the foot switch **Sound Active** to start sound-controlled operation.
Operating mode 'Freeze'	Press the foot switch **Freeze** to freeze the current show. Press the foot switch **Auto Run** or **Sound Active** to enable a restart.
Operating mode 'Blackout'	Press the foot switch **Blackout** for a blackout. Press the foot switch **Auto Run** or **Sound Active** to enable a restart.

8 Technical specifications

Number of DMX channels	2, 3, 4, 7, 8, 14 or 15 channels, depending on operation mode
Illuminant	28 × 3 W tri-colour LEDs (7 × per spot)
Dispersion angle	ca. 40°
Operating supply voltage	AC 100 … 240 V ~, 50 … 60 Hz
Power consumption	90 W
Fuse	5 mm × 20 mm, 2.0 A, 250 V, fast acting
T-bar width	1200 mm
Height (T-bar + tripod)	max. 2400 mm
Weight	16 kg

9 Cleaning

Optical lenses

Clean the exterior of accessible optical lenses periodically to optimise light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using normal glass cleaning products.
- Always dry the parts carefully.

10 Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device

This device is subject to the European directive 2002/96/EC.

Do not dispose of the device with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.